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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,512	01/05/2001	Raymond Kloth	112025-0074C1	6783

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EXAMINER
NGUYEN, TOAN D

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>14 January 2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,8-11,13-16,18-20 and 24-42* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,4,8-11,18-20 and 24-42* is/are allowed.

6)☒ Claim(s) *13-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>11 April 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1.   In view of the Appeal Brief filed on 01/14/08, PROSECUTION IS HEREBY

REOPENED. A non-final office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below:

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

Shani (US 6,023,563).

For claim 13, Shani discloses networking switch having the network presence of

a bridge, comprising:

using one or more indicia of frame type (figure 4, reference 20, col. 10, lines 51-

56) found in a received frame (figure 4, reference 10, col. 9, lines 58-60) to derive a

virtual local area network (derived VLAN) value (figure 4, reference 22, col. 10, lines 51-

58); and

using the derived VLAN value in making forwarding decisions (figure 4, reference

28, col. 10, line 63 to col. 11, line 1).

However, Shani does not expressly disclose said derived VLAN value used

internal to said switch, said derived VLAN value different from a VLAN value associated

the frame external to the switch. To include said derived VLAN value used internal to

said switch, said derived VLAN value different from a VLAN value associated the frame

external to the switch would have been obvious to one of ordinary skill in the art

because Shani teaches at col. 10, lines 51-56:"The NS extract the frame's MSA, NDA,

NSA, protocol type, and VLAN number (a VLAN value associated the frame external to

the switch) if this feature is enabled. With that data the NS searches the Main database,

using the NDA as a key, for the destination's MAC address and port number. Also if the

VLAN option is enabled it searches for the destination's VLAN number (derived VLAN

value means)." Therefore, the derived VLAN value different from VLAN value

associated the frame external to the switch).

For claim 16, Shani discloses networking switch having the network presence of

a bridge, comprising:

using one or more indicia of frame type (figure 4, reference 20, col. 10, lines 51-56) found in the received frame (figure 4, reference 10, col. 9, lines 58-60) to derive a virtual local area network (derived VLAN) value (figure 4, reference 22, col. 10, lines 51-58); and

using the derived VLAN value in making forwarding decisions (figure 4, reference 28, col. 10, line 63 to col. 11, line 1).

However, Shani does not expressly disclose said derived VLAN value used internal to said switch, said derived VLAN value different from a VLAN value associated the frame external to the switch. To include said derived VLAN value used internal to said switch, said derived VLAN value different from a VLAN value associated the frame external to the switch would have been obvious to one of ordinary skill in the art because Shani teaches at col. 10, lines 51-56:"The NS extract the frame's MSA, NDA, NSA, protocol type, and VLAN number (a VLAN value associated the frame external to the switch) if this feature is enabled. With that data the NS searches the Main database, using the NDA as a key, for the destination's MAC address and port number. Also if the VLAN option is enabled it searches for the destination's VLAN number (derived VLAN value means)." Therefore, the derived VLAN value different from VLAN value associated the frame external to the switch).

Allowable Subject Matter

4.   Claims 1-4, 8-11, 18-20 and 24-42 are allowed.

Regarding claims 1 and 11, the prior art fails to teach a combination of the steps of:

deriving a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said VLAN value, said derived VLAN value for use internal to said switch, in the specific combination as recited in the claims.

Regarding claim 9, the prior art fails to teach a combination of the steps of:

a parsing engine to derive a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said VLAN value, said derived VLAN value for use internal to said switch, in the specific combination as recited in the claim.

Regarding claim 18, the prior art fails to teach a combination of the steps of:

deriving a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said port index value, in the specific combination as recited in the claim.

Regarding claims 19, the prior art fails to teach a combination of the steps of:

a parsing engine to derive a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said index value, in the specific combination as recited in the claim.

Regarding claims 20, the prior art fails to teach a combination of the steps of:

means for deriving a virtual local area network (derived VLAN) value in response to said one or more of indicia of frame type and said index value, in the specific combination as recited in the claim.

Regarding claim 32, the prior art fails to teach a combination of the steps of:

applying the mapping address to a memory structure to obtain a derived VLAN

value that is based upon both the frame's protocol type and the VLAN value associated

with the input port, the derived VLAN value to differ form at least one other derived

VLAN value for another frame received on the input port, but having a different protocol

type, in the specific combination as recited in the claim.

Regarding claim 36, the prior art fails to teach a combination of the steps of:

an engine to concatenate the protocol code together with the VLAN value to

produce a mapping address, and to apply the mapping address to a memory structure

to obtain a derived VLAN value that is based upon both the frame's protocol type and

the VLAN value associated with the input port, the derived VLAN value to differ form at

least one other derived VLAN value for another frame received on the input port, but

having a different protocol type, in the specific combination as recited in the claim.

Regarding claim 39, the prior art fails to teach a combination of the steps of:

applying the subset value to a memory structure to map the subnet value to a

derived VLAN value, the derived VLAN value to differ form at least one other derived

VLAN value for another frame received on the input port, but having a different subnet

value, in the specific combination as recited in the claim.

Regarding claim 41, the prior art fails to teach a combination of the steps of:

an engine to, in response to the protocol type indicating a particular protocol

type, parse the source address to obtain a subnet value, and to apply the subset value

to a memory structure to map the subnet value to a derived VLAN value, the derived

VLAN value to differ form at least one other derived VLAN value for another frame

received on the input port, but having a different subnet value, in the specific

combination as recited in the claim.

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to TOAN D. NGUYEN whose telephone number is

(571)272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D. N./
Examiner, Art Unit 2616

/Huy D. Vu/

Supervisory Patent Examiner, Art Unit 2616